User's Manual

# Model 810518801
# SDH/SONET Frame Option

YOKOGAWA
Yokogawa Electric Corporation

IM 810518801-62E
1st Edition

## Introduction

Thank you for your purchasing of this SDH/SONET Frame Option.

This option consists of the pattern editor application software (CD-ROM), designed for easy creation of OH patterns of SDH/SONET frame for the AQ2200-601 10Gbit/s BERT Module.

This manual describes the functions, operating procedures, and handling precautions necessary to operate the OH pattern editor.

Before starting operation of this option, thoroughly read this manual to use the product properly.

After reading this manual, always store it in a safe place where all concerned personnel can refer to it immediately.

This manual is useful if the operator have forgotten proper operation steps during operation.

For the functions, operating procedures, and handling precautions of the BERT module and frame controller, refer to their respective manuals.

## Contents of the Package

- CD-ROM (for installation of the software): 1
- User's manual (this manual): 1

## Notes

- The contents of this manual are subject to change without prior notice as a result of continuing improvements to the instrument's performance and functions.
  The figures given in this manual may differ from those that actually appear on your screen.
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## Revisions

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# How to Use This Manual

## Structure of This Manual

This user's manual consists of the following chapters.

| Chapter | Title | Description |
|---|---|---|
| 1 | Description of Functions | This chapter provides an overview of the software and lists its main functions (file and editing functions). |
| 2 | Setup | This chapter describes the system requirements of the software, and lists the procedures for installing and uninstalling the software. |
| 3 | Operating Procedures | Provides the procedures for creating OH patterns using the software. |
| 4 | Loading Pattern Data | This chapter describes mounting to a frame controller and loading created OH pattern data. |
| | Appendix | Lists the initial setting values. |

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# 1.1 Overview

This application software is designed for easy creation of OH patterns of SDH/SONET frame for AQ2200-601 10Gbit/s BERT Module, and runs on Windows PC.

## Major Features

- OH pattern editor for AQ2200-601 10Gbit/s BERT Module
- Runs on Windows (98SE/ME/2000/XP SP1) and enables creation of OH pattern data.
- Created pattern data can be stored in the compact flash card.
- The pattern data stored in the compact flash card can be imported to the AQ2200 Series Frame Controller equipped with the AQ2200-601 10Gbit/s BERT Module, by inserting the compact flash card into the frame controller.
- This application software is designed for easy creation of OH pattern data for AQ2200-601 10Gbit/s BERT Module SDH/SONET frames, and runs on Windows PC.
- Easily create OH patterns for STM-0, OC-1/STM-1, OC-3/STM-64, and OC-192 units.

# 1.2 Function Overview

## (1) File Function

The file function is used to load/save a file or exit this application.
The file function setting items are shown below.

- Items available for SONET/SDH and Program modes
  - Loard the initial value of the OH pattern (SDH frame) (Init: SDH)
  - Loard the initial value of the OH pattern (SONET frame) (Init: SONET)
  - Opening a file (Open)
  - Overwriting a file (Save)
  - Specifying a file name and saving the data in that file (Save As)
  - Exiting the application (Exit)

The file functions can be set using the menu (File menu) and shortcut keys.
For details, see Section 3.6.

## (2) Edit Function

The edit function is used to create/edit OH pattern data.
The edit function setting items are shown below.

- Undoing an operation (Undo)
- Redoing an operation (Redo)
- Copy (Copy)
- Paste (Paste)
- Selecting all SOH/TOH (Select All)
- Edit mode (Edit Unit)

The edit functions can be set using the menu (Edit menu) and shortcut keys (except for Select xx).
For details, see Section 3.7.

# 2.1 System Environment



### Hardware Requirements

This software runs under the following environment.

| Item | Condition |
|---|---|
| Personal computer | |
| CPU | Pentium III 500MHz or higher |
| Hard disk capacity | 500MB or more recommended |
| Memory capacity | 256MB or higher |
| CD-ROM drive | |
| Monitor | Resolution 800 × 600 dots or higher, 256 colors or higher |
| Operating system | |
| | English/Japanese version *1<br>Windows 98SE, Windows ME, Windows 2000, Windows XP SP1 |

*1: If this application software is installed on Windows PC (Japanese version), texts will be displayed in Japanese.

***Note***

This manual explains the operating method when this application software is used with English Windows 2000.

# 2.2 Installation/Uninstallation

## Operating Procedures

### Installation

1. Start the PC.
2. Insert the attached CD-ROM containing this application software into the CD-ROM drive on the PC.
3. Double-click the **"Setup.Exe"** icon in the OHEdit folder of the CD-ROM drive.

   The installer will start and setup will begin.
4. Follow the instructions displayed on the screen to perform installation.
5. When installation is complete, a shortcut to the following submenu will be created: Windows **[Start]** button - **[Programs] - [OHEdit] - [OHEdit]**.

### Uninstallation

1. From the Windows **[Start]** button, select **[Settings] - [Control Panel] – [Add or Remove Programs]**.
2. Select **"OHEdit"** from the program list, and click [Remove].
3. Follow the instructions displayed on the screen.

## Explanation

● **Installation folder**

This application software will be installed in the following folder.
C:\Program Files\YOKOGAWA\OHEdit

● **Changing the installation folder**

The installation folder can be changed while **"Select Installation Folder"** is displayed during installation.

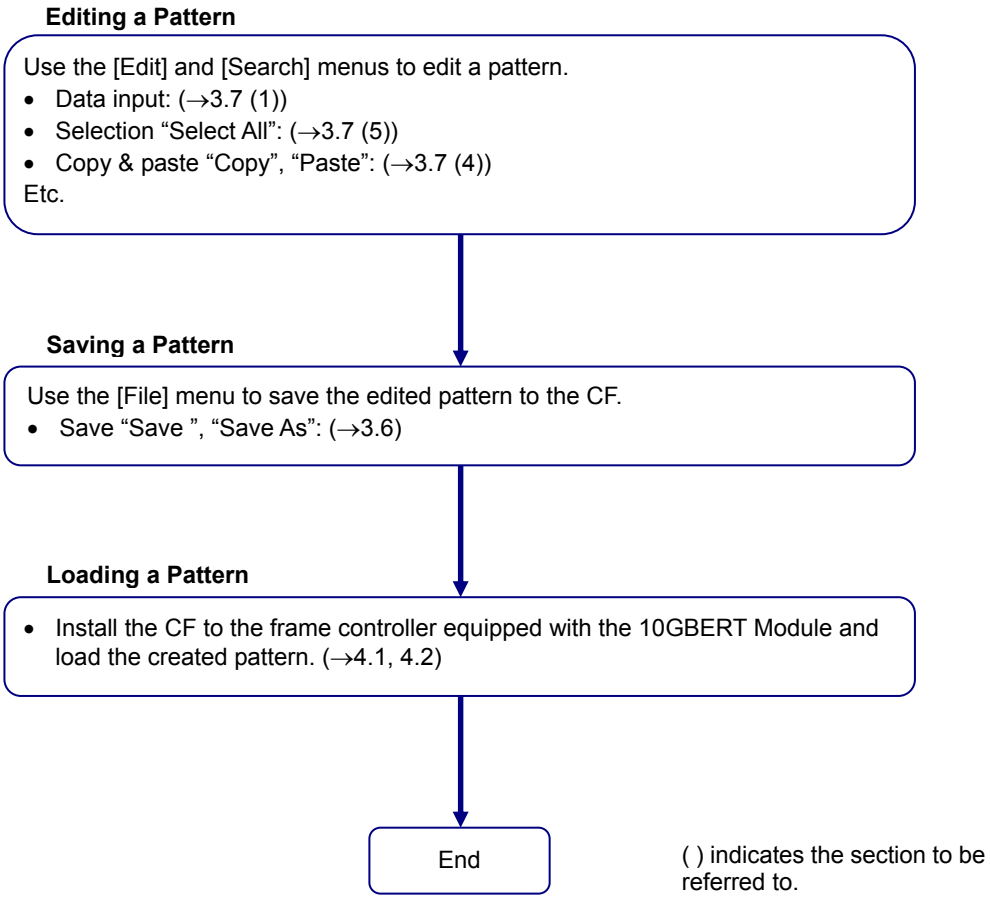
● **Installation files**

The following files will be installed.

- OHEdit.exe: Executable file
- sonet_init.dat: InitialOH data file for SONET
- sdh_init.dat: InitialOH data file for SDH

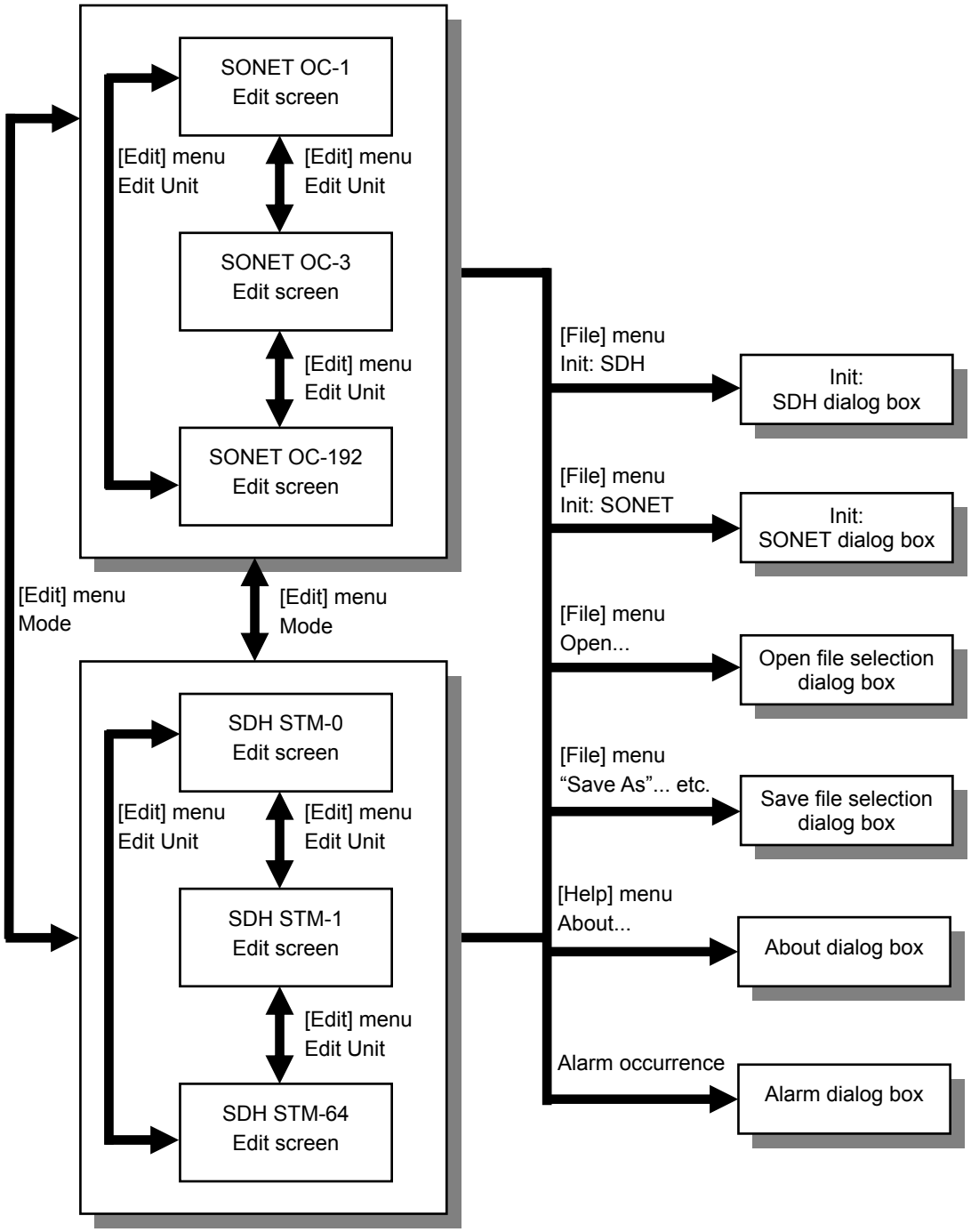
# 3.1 Flow of Operation

## Operation Flow



# 3.2 Screen Structure

The screen structure of this application software is shown below.

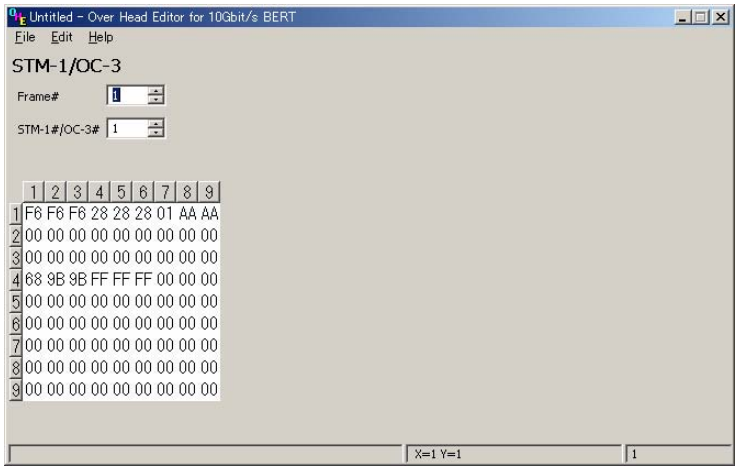


# 3.3 Starting the Application

## Operating Procedures

1. From the Windows **[Start]** button, select **[Programs] - [OHEdit] - [OHEdit]**, and then click it.

Over HEAD Editor for 10Gbit/s BERT (hereafter called OHEdit) will start.




## Explanation

- When starting the application, the initial settings are read. For the initial settings, see Appendix 1.

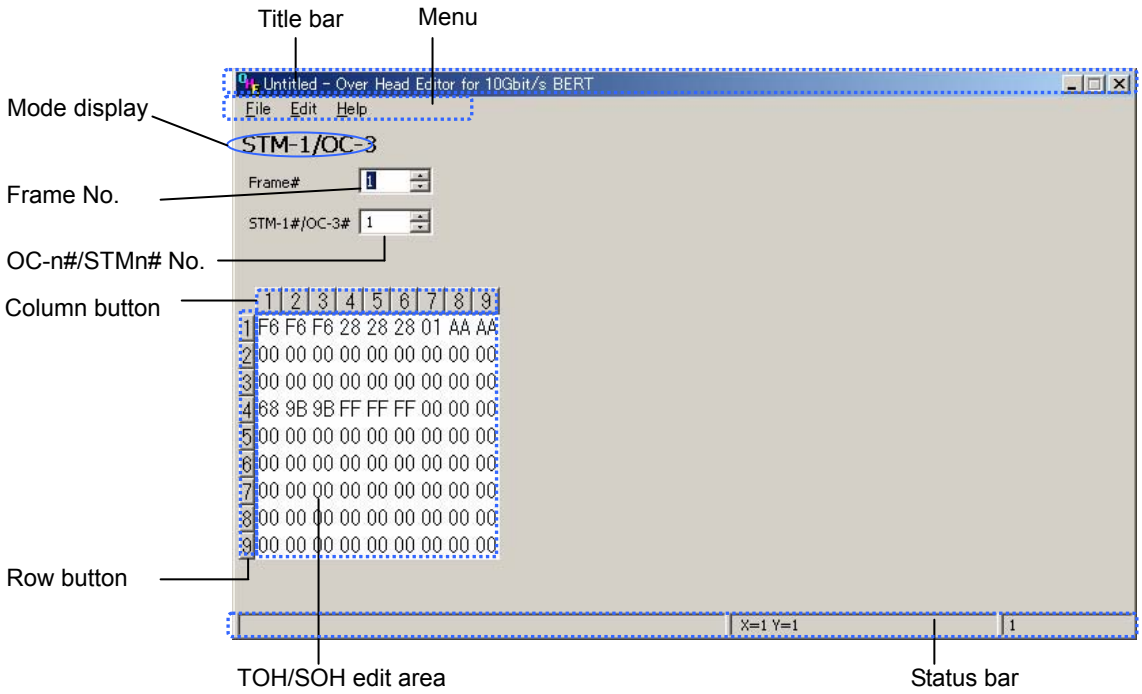
- For details regarding exiting the application, see Section 3.6 (5) “Exiting the Application (Exit)”.

***Note***

To load or save a file, insert the PC card adapter for CF (with the compact flash card installed) into the PC card slot on the PC.

# 3.4 Explanation of Each Screen

## SONET/SDH Mode

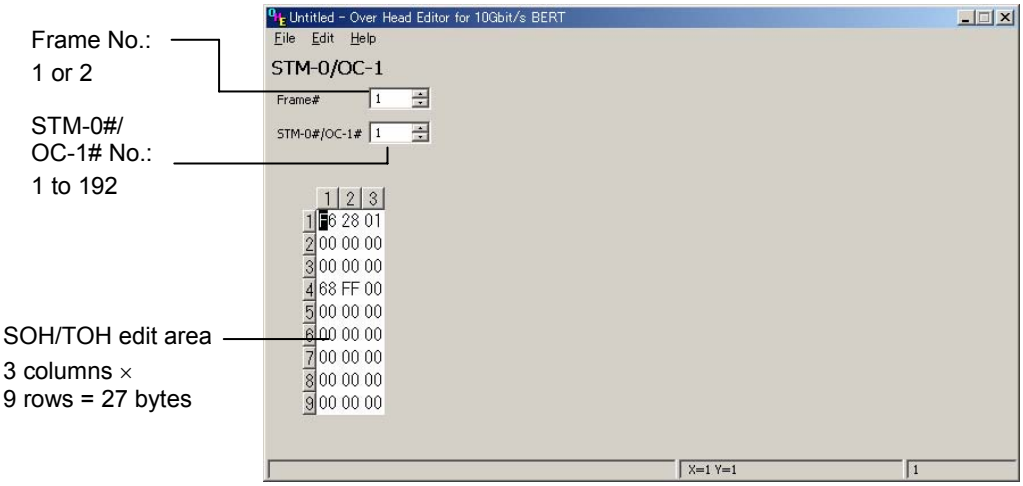



| Name | Function |
|---|---|
| Title bar | Displays the file name and the title name of this application.<br>If no file name is set, “Untitled” will be displayed.<br>An asterisk (*) is displayed at the end of the file during edit.<br>For details, see Section 3.9 (1). |
| Menu | Displays each operation item as a command.<br>For details, see Section 3.6. |
| Status bar | Displays the coordinates of the cursor position and the byte position of the data.<br>For details, see Section 3.9 (2). |
| Mode display | Displays the OH edit mode.<br>SONET OC-1/OC-3/OC-192/SDH STM0/STM1/STM64<br>For details, see Sections 3.5. |
| Frame No. | The frame No. can be displayed/changed (1: PPG, 2: ED). For details, see Sections 3.5. |
| OC-n#/STMn# No. | The OC-n# No. (screen No.) can be displayed/changed when SONET OC-1 or OC-3 has been selected as the operation mode, and the STMn# No. (screen No.) can be displayed/changed when SDH STM0 or STM1 has been selected. They will not be displayed if SONET OC-192, SDH STM64 has been selected as the operation mode.<br>For details, see Section 3.5. |
| TOH/SOH edit area | TOH data can be displayed/changed when SONET has been selected as the operation mode, and the SOH data can be displayed/changed when SDH has been selected. For details, see Section 3.5. |
| Column button | Used to select a column or consecutive columns.<br>For details, see Section 3.7 (4). |
| Row button | Used to select a row or consecutive rows.<br>For details, see Section 3.7 (4). |

# 3.5 Explanation of Each Operation Mode

## (1) SONET OC-1 Mode / SDH STM0 Mode

In SONET OC-1 and SDH STM-0 modes, a 10-Gbps frame can be edited in 192 blocks in OC-1 unit / STM0 unit.

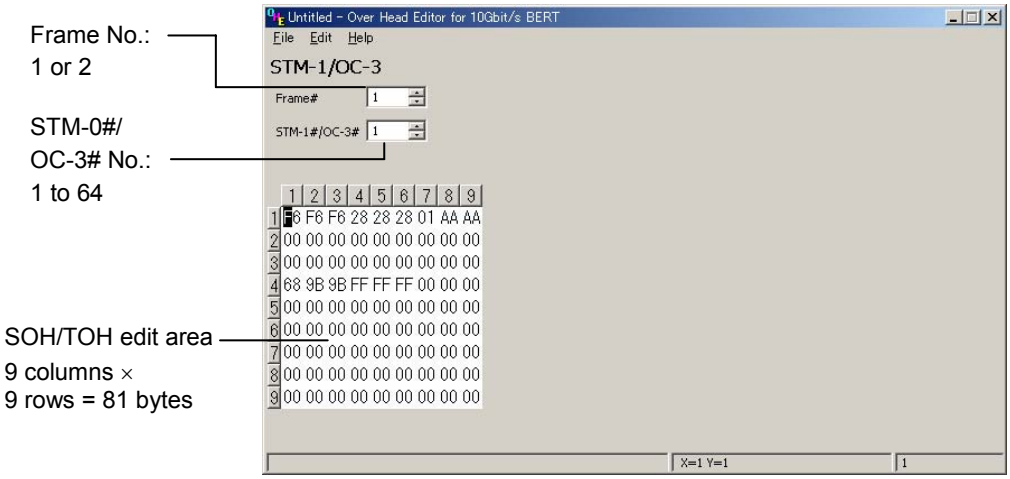



**SDH STM0 Mode**

- Frame No. (Frame#) — Displays the frame No. of the currently displayed data. The frame No. can be changed between 1 (PPG) and 2 (ED). To change it, enter the desired frame No. in the “Frame#” field and press the [Enter] key or select it by pressing the [▲] and [▼] buttons.
- STM-0# No./OC-1# No. (STM-0#/OC-1#) — Displays the screen No. of the currently displayed data. The screen No. can be changed between 1 and 192. To change it, enter the desired screen No. in the “STM-0#/OC-1#” field and press the [Enter] key or select it by pressing the [▲] and [▼] buttons.
- SOH/TOH edit area — Used to edit SOH/TOH data. Data of 3 columns × 9 rows (= 27 bytes) can be edited. Enter data (HEX format) in the SOH/TOH edit area directly.

## (2) SDH STM-1 mode / SONET OC-3 mode

In SDH STM-1 and SONET OC-3 modes, a 10-Gbps frame can be edited in 64 blocks in STM-1 unit / OC-3 unit.

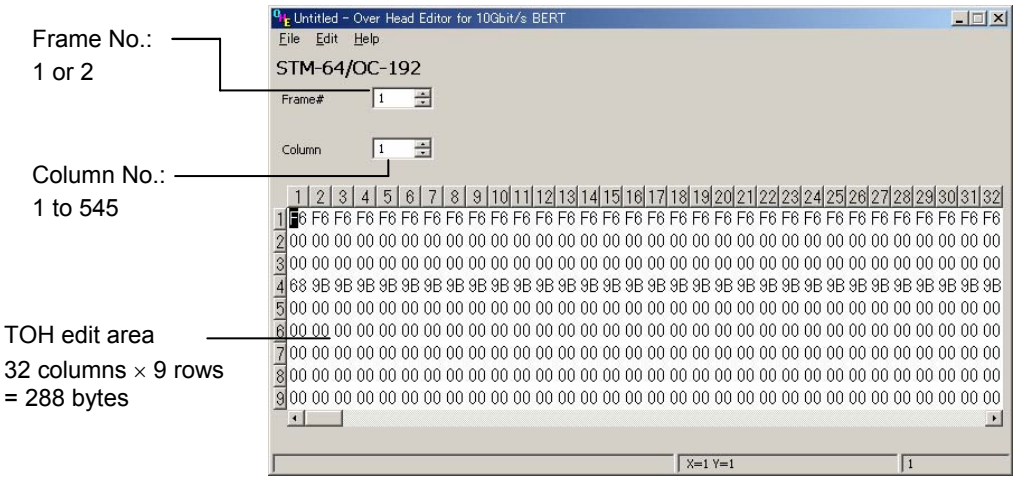



**SDH STM1 Mode**

- Frame No. (Frame#) — Displays the frame No. of the currently displayed data. The frame No. can be changed between 1 (PPG) and 2 (ED). To change it, enter the desired frame No. in the “Frame#” field and press the [Enter] key or select it by pressing the [▲] and [▼] buttons.
- STM-1# No./OC-3# No. (STM-1#/OC-3#)
  Displays the screen No. of the currently displayed data. The screen No. can be changed between 1 and 64. To change it, enter the desired screen No. in the “STM-1#/OC-3#” field and press the [Enter] key or select it by pressing the [▲] and [▼] buttons.
- SOH/TOH edit area — Used to edit SOH/TOH data. Data of 9 columns × 9 rows (= 81 bytes) can be edited. Enter data (HEX format) in the SOH/TOH edit area directly.

### (3) SDH STM-64 Mode / SONET OC-192 Mode

In SDH STM-64/SONET OC-192 modes, one 10-Gbps frame can be edited as it is in STM-1/OC-192 unit.




- Frame No. (Frame#) — Displays the frame No. of the currently displayed data. The frame No. can be changed between 1 (PPG) and 2 (ED). To change it, enter the desired frame No. in the “Frame#” field and press the [Enter] key or select it by pressing the [▲] and [▼] buttons.
- Column No. (column) — Displays the horizontal axis offset for column 1 in the SOH/TOH and PayLoad edit areas. The column No. can be changed between 1 and 568 in the case of SOH/TOH, and 1 and 16,676 in the case of Payload. To change it, enter the desired column No. in the “column” field and press the [Enter] key or select it by pressing the [▲] and [▼] buttons. The column No. changes with movement of the scroll bar.
- SOH/TOH edit area — Used to edit SOH/TOH data. Data of 32 columns × 9 rows (= 288 bytes) can be edited. Enter data (HEX format) in the SOH/TOH edit area directly.

# 3.6 File Operation

## (1) Creating SDH Overhead Initial Values (Init:SDH)

### Operating Procedures

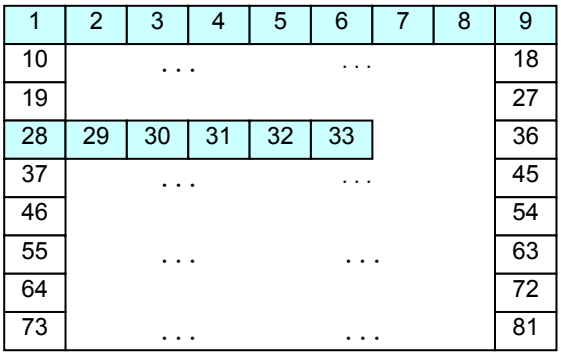
1. Choose **File** > **Init:SDH**.
2. SDH overhead initial values are created.

### Explanation

- SDH overhead initial value data file
  - sdh_init.dat: Created during installation (for details, see section 2-2 below).

- SDH overhead initial value data
  - Described below in units of 64-byte blocks. Each square in the diagram represents a block (64 bytes) of data. Values other than 00 are placed in dark colored blocks.

Structure of Overhead Data




| | | |
|---|---|---|
| Block 1 | F6 | (all 64 bytes) |
| Block 2 | F6 | (all 64 bytes) |
| Block 3 | F6 | (all 64 bytes) |
| Block 4 | 28 | (all 64 bytes) |
| Block 5 | 28 | (all 64 bytes) |
| Block 6 | 28 | (all 64 bytes) |
| Block 7 | 01-40 | |
| Block 8 | AA | |
| Block 9 | AA | |
| Block 10-27 | 00 | (all in this range) |
| Block 28 | 68 | (first byte only) |
| | 9B | (remaining 63 bytes) |
| Block 29 | 9B | (all 64 bytes) |
| Block 30 | 9B | (all 64 bytes) |
| Block 31 | FF | (all 64 bytes) |
| Block 32 | FF | (all 64 bytes) |
| Block 33 | FF | (all 64 bytes) |
| Block 34-81 | 00 | (all in this range) |

### (2) Creating SONET Overhead Initial Values (Init:SONET)

**Operating Procedures**

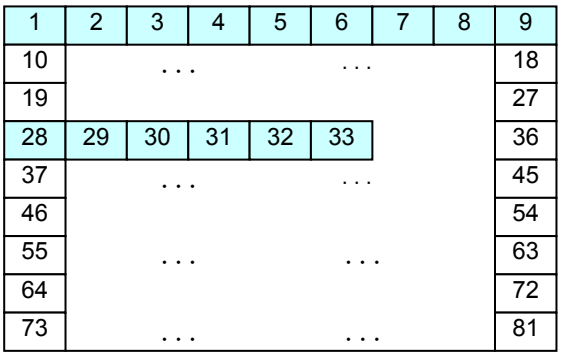
1. Choose **File** > **Init:SONET** from the **menu**.
2. SONET overhead initial values are created.

**Explanation**

- SONET overhead initial value data file
  - sonet_init.dat: Created during installation (for details, see section 2-2 below).

- SONET overhead initial value data
  - Described below in units of 64-byte blocks. Each square in the diagram represents a block (=64 bytes) of data. Values other than 00 are placed in dark colored blocks.

Structure of Overhead Data




| | | |
|---|---|---|
| Block 1 | F6 | (all 64 bytes) |
| Block 2 | F6 | (all 64 bytes) |
| Block 3 | F6 | (all 64 bytes) |
| Block 4 | 28 | (all 64 bytes) |
| Block 5 | 28 | (all 64 bytes) |
| Block 6 | 28 | (all 64 bytes) |
| Block 7 | 01-40 | |
| Block 8 | 41-48 | |
| Block 9 | 80-C0 | |
| Block 10-27 | 00 | (all in this range) |
| Block 28 | 60 | (first byte only) |
| | 93 | (remaining 63 bytes) |
| Block 29 | 93 | (all 64 bytes) |
| Block 30 | 93 | (all 64 bytes) |
| Block 31 | FF | (all 64 bytes) |
| Block 32 | FF | (all 64 bytes) |
| Block 33 | FF | (all 64 bytes) |
| Block 34-81 | 00 | (all in this range) |

## (3) Opening a File (Open)

### Operating Procedures

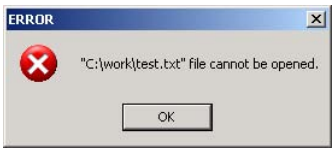
1. Select **[File] - [Open...]** from the **menu bar**.
   The **Open file selection dialog box** will appear.
2. Select the data file to be imported, and click <Open>.
   The imported data will be displayed in the SOH/TOH edit area.

   If you are not going to import the data, click <Cancel>.
   The current edit screen will reappear.

### Explanation

- File format that can be imported
  Data in dat format can be imported.
  “file name”.dat

- When a file in unknown format is selected
  The following **alarm dialog box** will appear, informing you that the data file cannot be imported.
  Click <OK> to return to the current edit screen.




  “drive name\folder name\file name” file cannot be opened.

## (4) Overwriting a File (Save)

### Operating Procedures

**<When a file name has been set for the currently edited data>**

1. Select **[File] - [Save]** from the **menu bar**.
   The data will be overwritten and the current edit screen will reappear.

**<When no file name has been set for the currently edited data>**

1. Select **[File] - [Save]** from the **menu bar**.
   The **Save file selection dialog box** will appear.
2. Enter a file name and click <Save>.
   The data will be saved to the specified file and the current edit screen will reappear.

   If you are not going to save the data, click <Cancel>.
   The current edit screen will reappear.

### Explanation

- File save format
  The data is saved in dat format.
  “file name”.dat

### (5) Specifying a File Name and Saving the Data in That File (Save As)

**Operating Procedures**

1. Select **[File] - [SaveAs…]** from the **menu bar.**
   The **Save file selection dialog box** will appear.
2. Enter a file name and click <Save>.
   The data will be saved to the specified file and the current edit screen will reappear.

   If you are not going to save the data, click <Cancel>.
   The current edit screen will reappear.

**Explanation**

● File save format
The data is saved in dat format.
"file name".dat

### (6) Exiting the Application (Exit)

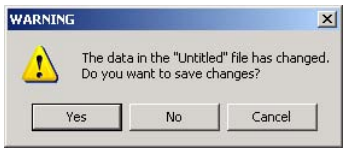
**Operating Procedures**

**<When the data has been saved>**

1. Select **[File] - [Exit]** from the **menu bar**.
   The application will be exited.

**<When the data has not been saved>**

1. Select **[File] - [Exit]** from the **menu bar**.
   The following **alarm dialog box** asking you whether to save the currently edited data will appear.




2. To save the data and exit the application, click <Yes>.
   To exit the application without saving the data, click <No>.
   To return to the edit screen without saving the data, click <Cancel>.

**Explanation**

● When <Yes> is clicked
- If a file name has been set, the data will be overwritten and saved.
- If no file name has been set, the **Save file selection dialog box** will appear. Enter a file name and click <Save>. The data will be saved.

***Note***

Commercially available CF adapter required when writing to CF card.

# 3.7 Edit Operation

## (1) Entering data

### Operating Procedures

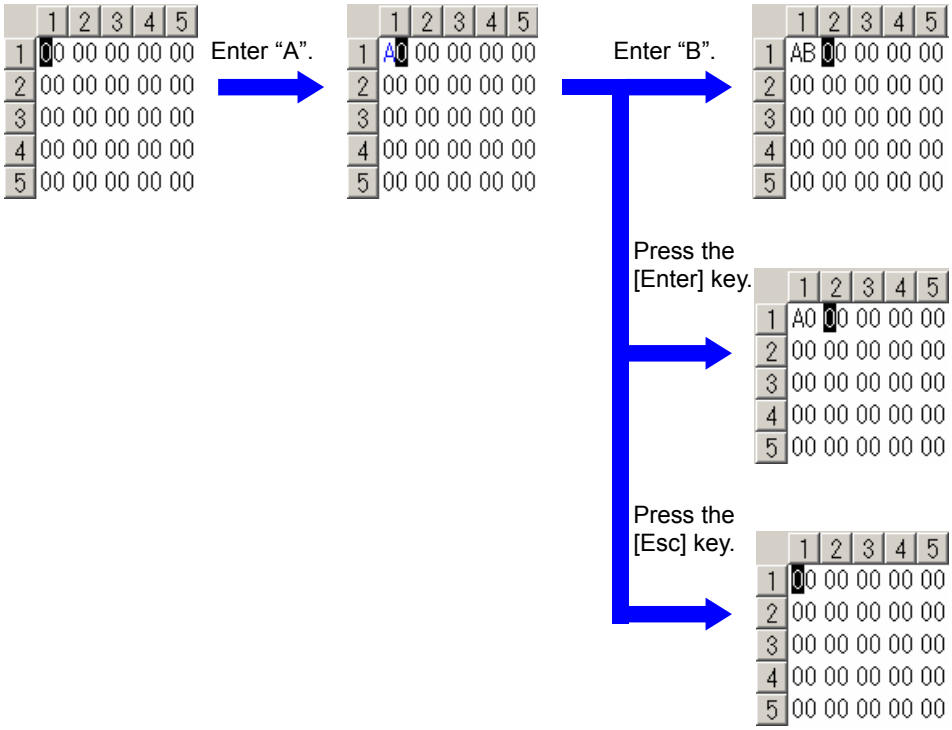
1. In the SOH/TOH edit area, locate the cursor at the position where you want to enter data.
2. Enter the desired character (“0” to “F”).
   When entry of the upper byte is complete, the entered character will be displayed in blue.
3. Next, enter the desired character (“0” to “F”) for the lower byte.
   When entry of the lower byte is complete, the data will be confirmed and the cursor will move to the next data position.
4. To continue to enter more data, repeat steps 2 to 3.

### Explanation

- Data can be entered one byte at a time.
  - If the lower byte data has not been entered even though the upper byte data has, the characters will be displayed in blue indicating that the data cannot be confirmed.
  - If you press the [Enter] key with the upper byte entered, the data consisting of the upper byte and the currently displayed lower byte data will be confirmed.
  - If you press the [Esc] key with the upper byte entered, the upper byte data will be canceled.

- Characters “0” to “F” (HEX) can be entered.
  If any other characters are entered, they will be ignored and the contents of the screen will not be changed.

- Graphical explanation of data entry procedure



### (2) Undoing an Operation (Undo)

**Operating Procedures**

1. Select **[Edit] - [Undo]** from the **menu bar**.
   The previous contents of the currently edited data will be restored.

**Explanation**

- Conditions for Undo operation
  Undo is effective just after data input, paste and fill edit operations.

  Undo will be invalid (i.e. displayed in gray) before edit and just after undo, indicating that Undo cannot be selected.

- Recorded number of Undo operations
  Only one undo operation is recorded.

### (3) Redoing an Operation (Redo)

**Operating Procedures**

1. Select **[Edit] - [Redo]** from the **menu bar**.
   The contents of the currently edited data effective just before the last undo will be restored.

**Explanation**

- Conditions for Redo operation
  Redo can only be selected just after undo is performed.

  Redo will be invalid (i.e. displayed in gray) if edit operation is performed after undo, indicating that Undo cannot be selected.

- Recorded number of Redo operations
  Only one redo operation is recorded.

## (4) Copy & Paste

### Operating Procedures

1. In the SOH/TOH edit area, select the area of the data (1 byte or more) to be copied.
2. Select **[Edit] - [Copy]** from the **menu bar**.
3. Select the area (1 byte or more) to which the selected data is to be pasted.
4. Select **[Edit] - [Paste]** from the **menu bar**.
   The copied data will be pasted into the selected area.

### Explanation

- Selecting an area
  Area selection items include column, row, and All.
  The selected area will be highlighted.
  - Column
    The specified column is selected.
    If you click the mouse with the focus located on a column button (in the SOH/TOH edit area), all the data present in that column will be selected.
    If you select a column and drag the mouse or press a cursor key + [Shift] key, all the data present in the selected column area will be selected.
  - Row
    The specified row is selected.
    If you click the mouse with the focus located on a row button (at the left of the SOH/TOH edit area), all the data present in that row will be selected.
    If you select a row and drag the mouse or press a cursor key + [Shift] key, all the data present in the selected row area will be selected.
  - All
    The SOH/TOH edit area is selected.
    For details, see Section 3.7 (5).

- Canceling the selected area
  If you press the [Esc] key while an area is currently selected, the selected area will be cancelled and only the data at the selected position will be selected.
  If you click the mouse while an area is currently selected, the selected area will be cancelled and only the data at the clicked position will be selected.
  The selected area will also be cancelled if the focus moves into another edit area.

- Copy operation
  If you execute a new copy after executing a copy, the old copied data will be deleted.
  The data inside the copy area will be kept irrespective of the selected area's shape (column, row, and All).

- Paste operation
  - When no data area has been selected
    If only one data is specified without selecting an area, the content of the copied data will be pasted starting from the specified position up to the copy size.
  - When a data area has been selected
    If a data area has been selected, the copied data will be pasted into that area.
  - If the selected area's shape (column, row, and All) of the copy source differs from that of the paste destination, the data will be pasted serially.
  - When the selected area of the copy source differs from that of the paste destination
    Copy source > Paste destination

    If the copy data is larger than the selected paste area, the copied data will be pasted, starting form the beginning of the data up to the selected area size.

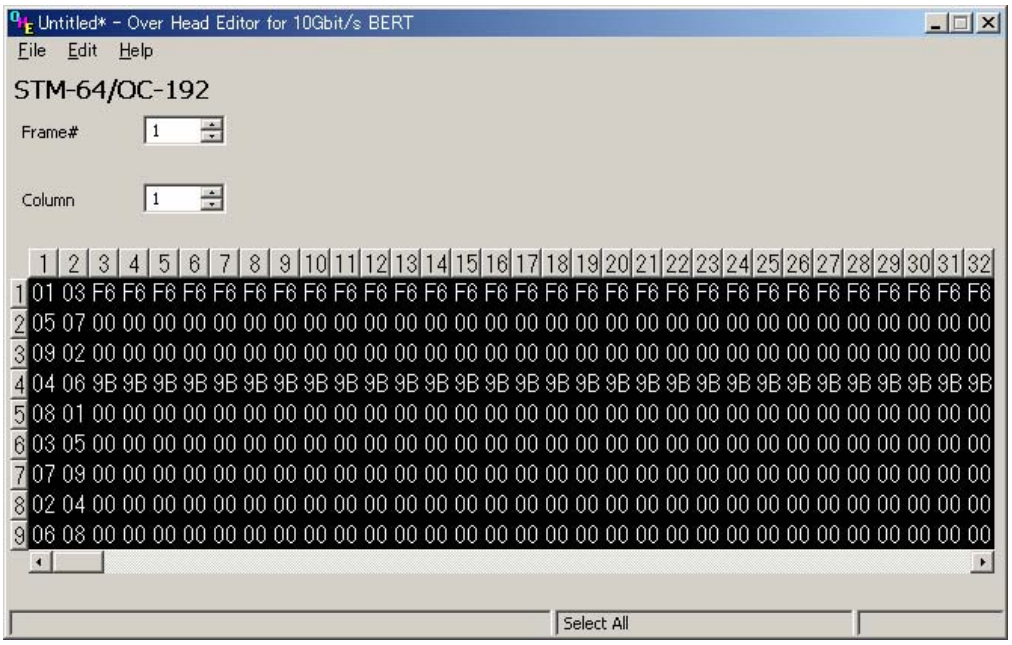
    Copy destination > Paste source

    If the selected paste area is larger than the copied data, the copied data will be pasted repeatedly until the entire selected area is filled with the data.

## (5) Selecting All Data (Select All)

### Operating Procedures

1. Select **[Edit] - [Select All]** from the **menu bar**.
2. The Edit area will be highlighted indicating that it is currently selected.




### Explanation

- The selected area contains parts that are displayed when scrolled.

# 3.8 Setup Operation

## Help Menu (Help)

### Operating Procedures

1. Select **[Help] - [About…]** from the **menu bar**.
   The **About dialog box** will appear.

2. Click <OK> to return to the previous screen.

### Explanation

- The About dialog box shows the version information of this application.

# 3.9 Explanation of Other Functions

## (1) Title Bar

Displays the file name and the title name of this application.
If a file name has been set, “file name.dat” will be displayed.
If no file name is set, “Untitled” will be displayed.
An asterisk (*) is displayed at the end of the file during edit.

- When the file name is “STM-1_SOH.dat” and the file is not currently edited

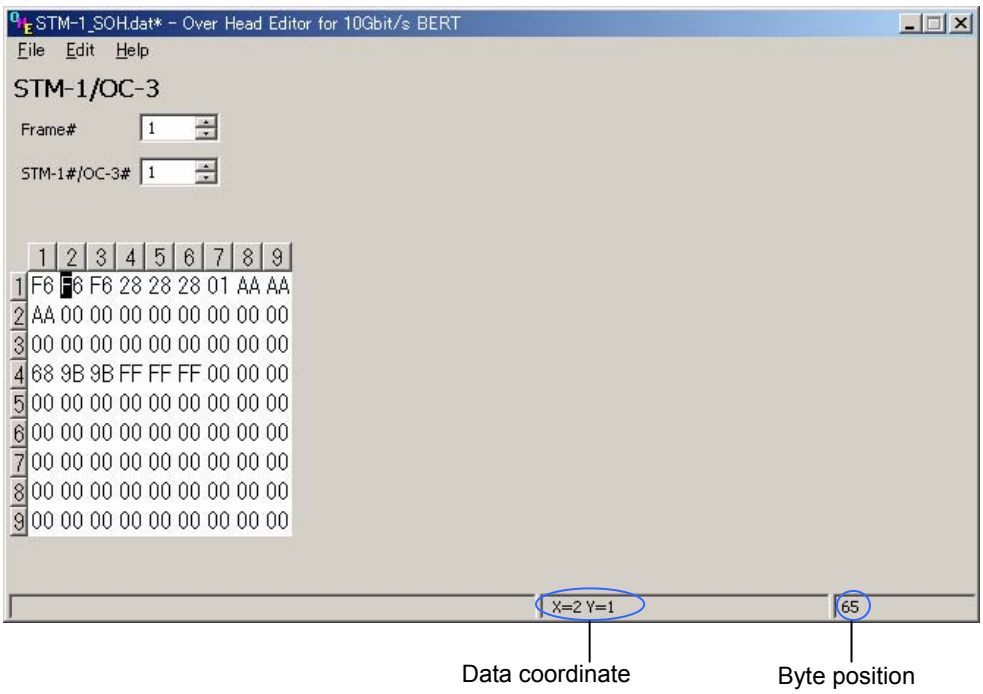
- When the file name is “STM-1_SOH.dat” and the file is currently edited

- When no file name is set and the file is not currently edited

- When no file name is set and the file is currently edited

## (2) Status Bar

Displays the coordinates of the data located at the cursor position and the byte position of that data (relative position from the beginning of the data).




Display content of the status bar

| Area Selection | Data Coordinates | Byte Position |
|---|---|---|
| Only one data is selected | "X=x Y=x"<br>Displays the coordinate (x, y) of the cursor position in TOH/SOH area. | Displays the byte position of the selected data (from the beginning of the frame). |
| A to B is selected | "(x1, y1) - (x2, y2)"<br>Displays the coordinate (x, y) of the cursor position in TOH/SOH area. | Displays the byte position of the selected data (from the beginning of the frame). |
| One column is selected in TOH/SOH | "column x"<br>Displays the coordinate x of the selected column in TOH/SOH area. | None |
| Column selection is made in TOH/SOH | "column (x1) - (x2)"<br>Displays the coordinate x1, x2 of the selected column area in TOH/SOH area. | None |
| One row is selected in TOH/SOH | "row y"<br>Displays the coordinate y of the selected row in TOH/SOH area. | None |
| Row selection is made in TOH/SOH | "row (y1) - (y2)"<br>Displays the coordinate y1, y2 of the selected row area in TOH/SOH area. | None |
| TOH/SOH is selected | “Select TOH” / “Select SOH” | None |
| All is selected | “Select All” | None |

1) In the case of “A to B”, the contents in the “Data coordinates” and “Byte position” fields differ depending on the selection method.

   Data coordinates: (Start position x1, y1) – (End position x2, y2)

   Byte position: Displays the byte position of the end position.

   Example 1) When selecting (1,1) to (5,1) in STM-1/OC-3 using the “A to B” selection method

   Data coordinates: (1,1) to (5,1)

   Byte position: 257

   Example 2) When selecting (5,1) to (1,1) in STM-1/OC-3 using the “A to B” selection method

   Data coordinates: (5,1) to (1,1)

   Byte position: 1

2) In the case of column/row selection, the content in the “Data coordinates” field differs depending on the selection method.

   Data coordinates: For column (Start position x1) – (End position x2)
   For row (Start position y1) – (End position y2)

   Example 1) When selecting columns (1) to (5) in STM-1/OC-3

   Data coordinates: PayLoad columns (1) to (5)

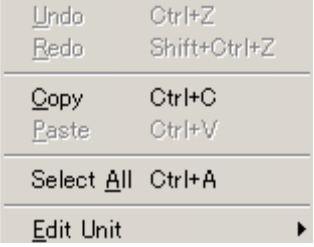
   Example 2) When selecting columns (5) to (1) in STM-1/OC-3

   Data coordinates: PayLoad columns (5) to (1)

* In the above examples, the selected area is the same, though the display contents differ. Therefore, file operation and copy & paste operation have the same results.

### (3) Context Menu

If you right-click with the cursor located in an edit area, a context menu will appear.
It contains the same items as the [Edit] menu.



# 4.1 Preparation

### (1) Installing the Compact Flash Card

Install the compact flash card containing the created pattern data into the AQ2201/AQ2202 Frame Controller equipped with the AQ2200-601 10Gbit/s BERT Module.

***Note***

The compact flash card can be inserted/removed even if the power to the frame controller is currently ON.
However, do not remove it while the BERT application is in progress.

### (2) Starting the BERT Application

Press the [APPLI] key on the front panel of the frame controller to start the BERT application.

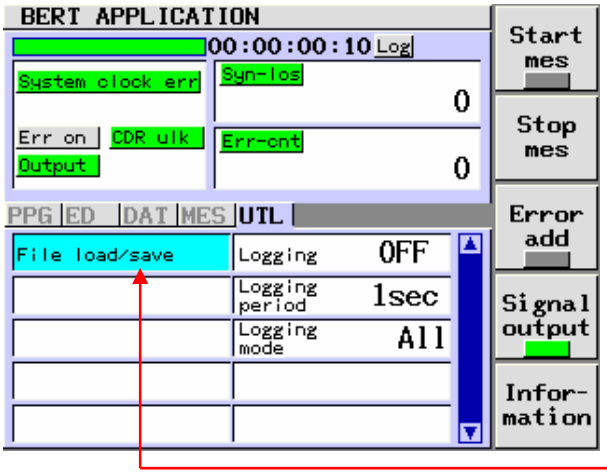
***Note***

For details, see Section 5.4 in the AQ2200-601 10Gbit/s BERT Module's Users Manual (IM810518801-01E).

# 4.2 Loading a File

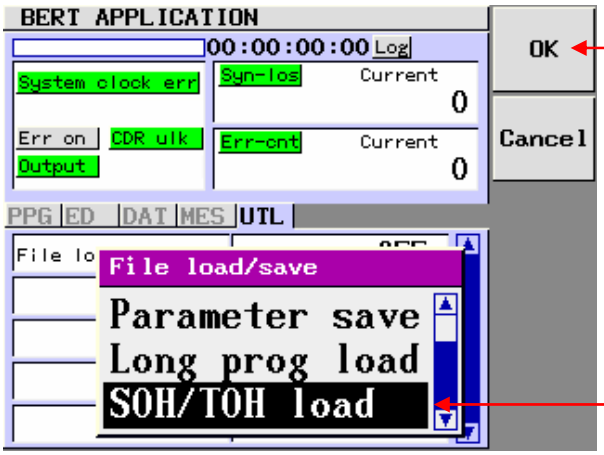
Load a pattern data file stored in the compact flash card to the BERT Module.

## Operating Procedures




1. With the **[CHAN]** or **[FRAME] key**, select **UTL** for the current module.
2. With the [▲], [▼], [◀], or [▶] **key**, move the cursor so that **"File load/save"** becomes the current parameter and press the **[ENTER] key**.
3. The File load/save popup screen will appear.
   With the [▲] or [▼] **key**, move the cursor to any of **Parameter load**, Parameter save, and Long prog load, and press the **<OK>** or **[ENTER] key**, and the **File select screen** will appear.

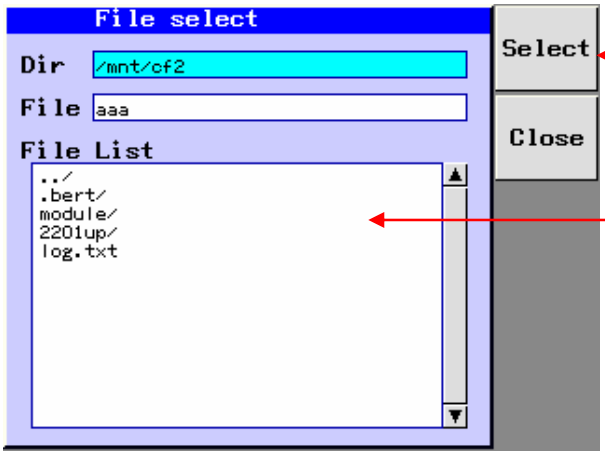
(1) Move the cursor to **"File load/save"** and press the **[ENTER] key**.



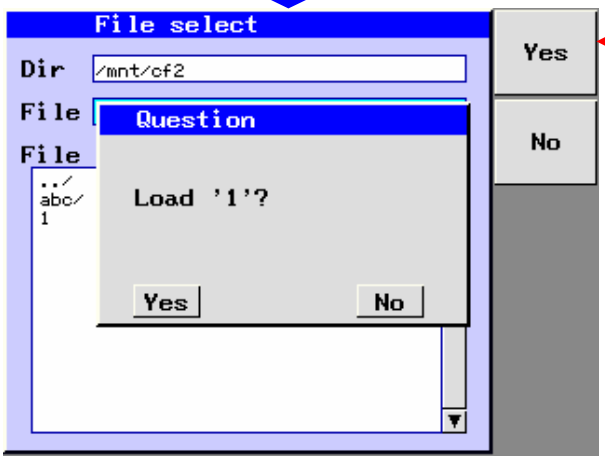

(3) Press the **<OK>** or **[ENTER] key**, and the File select screen will appear.

(2) With the [▲] or [▼] **key**, select any of Parameter load, Parameter save, and **SOH/TOH load**.

**Popup Screen**




File Select Screen




Question Popup Screen

4. On the **File select screen**, move the cursor to the corresponding file in the **File List** using the [▲] or [▼] **key**, and press the **<Select>** or **[ENTER] key**.
5. The **Load Question** popup screen will appear. Press the **<Yes>** or **[ENTER] key**, and the selected file will be loaded.

(5) Press the **<Select>** or **[ENTER] key**, and the Load Question popup screen will appear.

(4) With the [▲] or [▼] **key**, move the cursor to the corresponding file in the **File List**.

(6) Press the **<Yes>** or **[ENTER] key**, and the selected file will be loaded.

***Note***

For details, see Section 5.5 in the AQ2200-601 10Gbit/s BERT Module's Users Manual (IM810518801-01E).

# Appendix

## Appendix 1 Initial Setting Values

| Setting Item | Initial Value | Remarks |
|---|---|---|
| Screen edit mode (“Edit Unit”) | STM-1/OC-3 | |
| Frame No. (“Frame#”) | 1 | |
| Screen No. ("OC-n# / STMn#") | 1 | |